DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera/

Gensteel Doors Inc. 4950 Hickmore Street Ville St. Laurent, Quebec, Canada H4T1K6

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Section and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### DESCRIPTION: Series "GenStorm" Inswing Opaque Steel Doors

**APPROVAL DOCUMENT:** Drawing No. **AD11-04**, titled "Genstorm Opaque Inswing Door - LMI", sheet 1 through 8 of 8, dated FEB 21, 2012, prepared by MCY Engineering, Inc, signed and sealed by Yiping Wang, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large Missile Impact Resistant Limitation:

- 1. See Design Pressures & corresponding Hardware in sheets 1 & 6. Max. Exterior (positive) DP= +33 (double), +65 (Single) w/ PEMKO-177 AT threshold, where water infiltration requirement is needed.
- 2. Options #1, 2 & #3 require total two (2) flush bolts (top/bottom) on in-active panel.

**LABELING:** Each unit shall bear one of the following permanent labels:

Gensteel Doors Inc.

4950 Hickmore Street

Gensteel Doors Inc.

2335 Industrial Park Drive

North American Doors Corp.

1950 Hickmore Street 2335 Industrial Park Drive

1471 Military Turnpike

Ville St. Laurent, Quebec, Canada H4T1K6 Cornwall, Ontario, Canada K6H7M4 Plattsburgh, NY 12901-1911 and series/model and the statement: "Miami-Dade County Product Control Approved".

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1, as well as approval document mentioned above. The submitted documentation was reviewed by Ishaq I. Chanda, P.E.

NOA No 11-0907.01 Expiration Date: February 23, 2017 Approval Date: March 08, 2012 Page 1

MIAMI-DADE COUNTY
APPROVED

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. AD11-04, titled "Genstorm Opaque Inswing Door LMI", sheet 1 through 8 of 8, dated FEB 21, 2012, prepared by MCY Engineering, Inc, signed and sealed by Yiping Wang, P.E.

#### B. TESTS

- 1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94 (w/ PEMO 177 AT)
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94
  - 7) Tensile Test, per ASTM A370-05

Along with marked-up drawings and installation diagram of Genstorm Opaque Double & Single Swinging Doors, prepared by Fenestration Testing Laboratory, Inc., Test Reports No(s). 6491, dated 05/31/11, signed and sealed by Martin D. Brinson, P.E.

Note: This test report has addendum letter dated Nov 11, 2011 issued by Fenestration Testing lab, signed and sealed by Martin D. Brinson, P.E.

#### C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2007 & FBC 2010, prepared by MCY Engineering, Inc, dated 08/31/11 and last revised on 12/03/12, signed and sealed by Yiping Wang, P.E.

#### D. QUALITY ASSURANCE

1. Miami Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

#### E. MATERIAL CERTIFICATIONS

- 1. Tensile Test, per ASTM A370-05 item B (1) (7)
- 2. Tensile test report N0. FTL 6745 per ASTM A370-05 dated 12/01/11, issued by Fenestration Testing Lab, signed and sealed by Martin D. Brinson, P.E.

#### F. STATEMENTS

- 1. Statement letter of conformance dated 12/04/11, prepared by MCY Engineering, Inc, signed and sealed by Yiping Wang, P.E.
- 2. Statement letter of no financial interest dated 08/04/11, prepared by MCY Engineering, Inc, signed and sealed by Yiping Wang, P.E.
- 3. Statement letter of Lab. Compliance, as a part of above test reports.
- 4. Addendum letter dated 11/11/11 issued by FTL, signed & sealed by Martin D. Brinson, P.E.

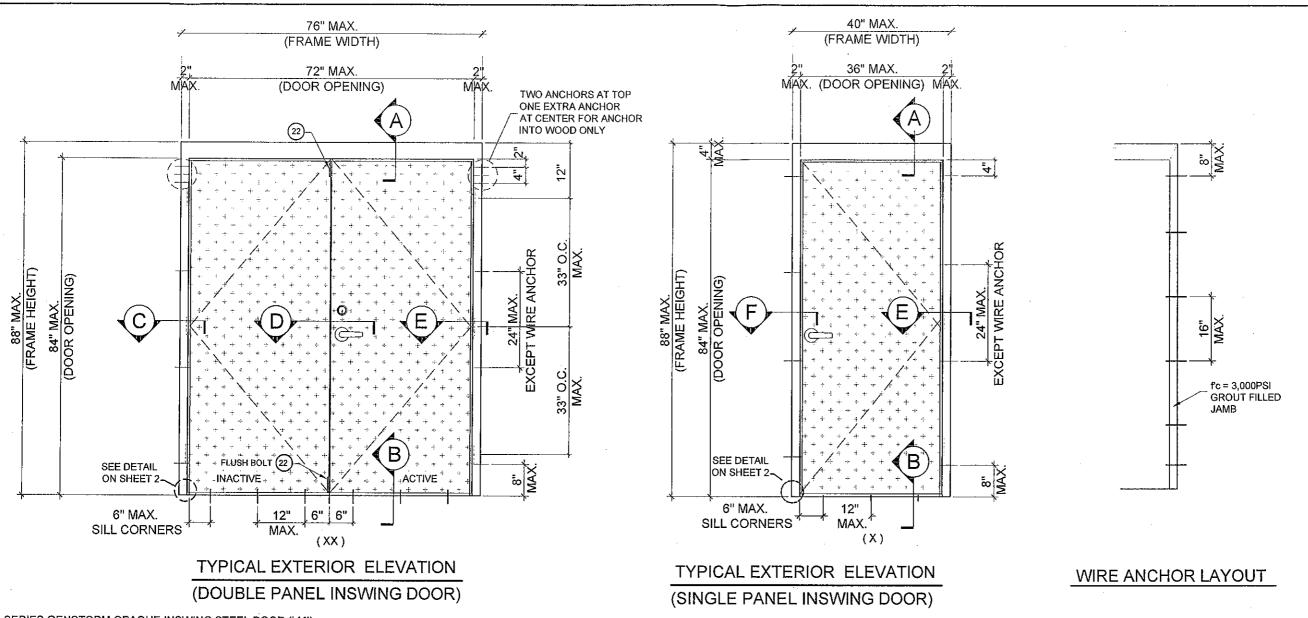
#### G. OTHER

- 1. Test proposals # **10-0769R** dated 11/27/11 and e-mail 11/01/10 approved by PERA.
- 2. Distribution agreement between GenSteel Door, Canada & North American Door Corp, N.Y. dated 10/22/10, signed by Bruno Gervasi and Antonio Gervasi, respectively.

Ishaq I. Chanda, P.E. Product Control Examiner

NOA No 11-0907.01

Expiration Date: February 23, 2017 Approval Date: March 08, 2012



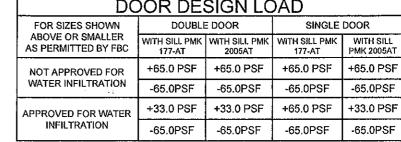
#### SERIES GENSTORM OPAQUE INSWING STEEL DOOR (LMI)

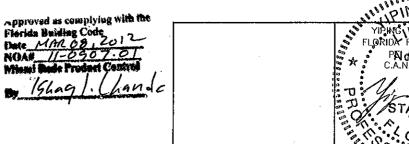
- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2007/2010 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- DOORS RATED FOR LARGE MISSILE IMPACT AND DO NOT REQUIRE SHUTTERS.
- SEE DOOR DESIGN LOAD CHART FOR APPLICABLE WATER RATING WITH SILL PEMKO 177-AT OR PEMKO 2005 AT
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS.
- METAL STRUCTURES NOT BY GENSTEEL DOOR CO. MUST SUPPORT LOADS IMPOSED BY DOOR SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

- WOOD BUCKS BY OTHERS MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
- A LOAD DURATION FACTOR IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- DOOR PANEL: MIN. 20 GA. STEEL MIN. Fy = 47.3 KSI MIN. DOOR FRAME: MIN. 18 GA. STEEL MIN. Fy = 47.3 KSI MIN
- DOOR PANEL STAINLESS OPTION: 20 GA STAINLESS STEEL DOOR PANEL MEETING MIN. Fy = 47.3 ksi OR BETTER MAY QUALIFY HAVING "MIL-CERTIFICATE" AS A VERIFICATION OF THE AVAILABLE MIN. YIELD STRENGTH.
- DOOR FRAME STAINLESS OPTION: 18 GA STAINLESS STEEL DOOR FRAME MEETING MIN. Fy = 47.3 ksi OR BETTER MAY QUALIFY HAVING "MIL-CERTIFICATE" AS A VERIFICATION OF THE AVAILABLE MIN. YIELD STRENGTH.

NOTES: EGRESS REQUIREMENTS TO BE REVIEWED BY BUILDING OFFICIAL.

DOOR DESIGN LOAD							
FOR SIZES SHOWN	DOUBLE DOOR		SINGLE DOOR				
ABOVE OR SMALLER AS PERMITTED BY FBC	WITH SILL PMK 177-AT	WITH SILL PMK 2005AT	WITH SILL PMK 177-AT	WITH SILL PMK 2005AT			
NOT APPROVED FOR	+65.0 PSF	+65.0 PSF	+65.0 PSF	+65.0 PSF			
WATER INFILTRATION	-65.0PSF	-65.0PSF	-65.0PSF	-65.0PSF			
APPROVED FOR WATER	+33.0 PSF	+33.0 PSF	+65.0 PSF	+33.0 PSF			
INFILTRATION	-65.0PSF	-65.0PSF	-65.0PSF	-65.0PSF			





MIAMI DADE COUNTY

YIPING WANTG/VIPE: 02-02-12 °CÂLE DRÄVN PRÖJECT STATE OF 11-007 AD11-04 SHEET 1 OF 8

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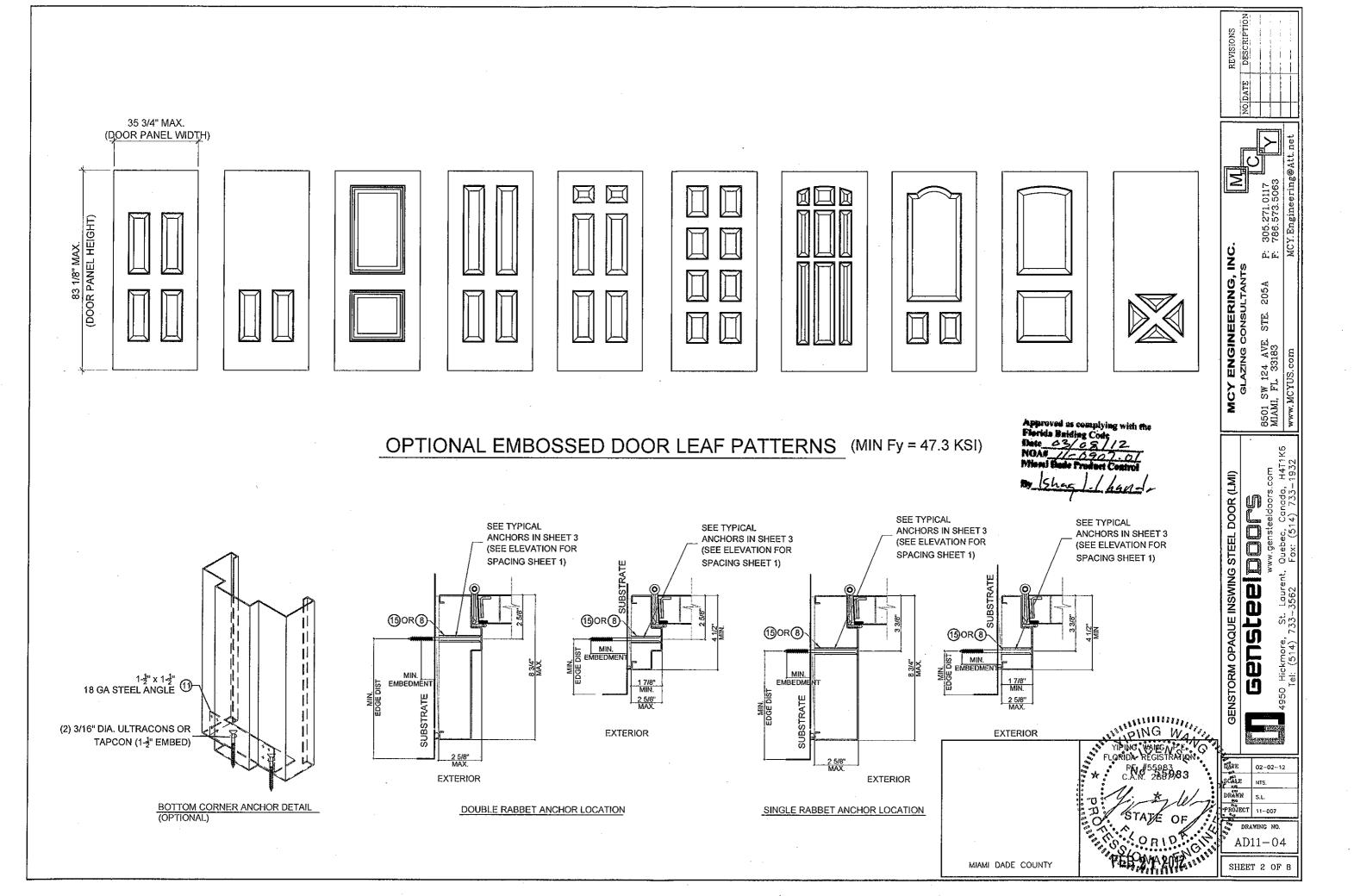
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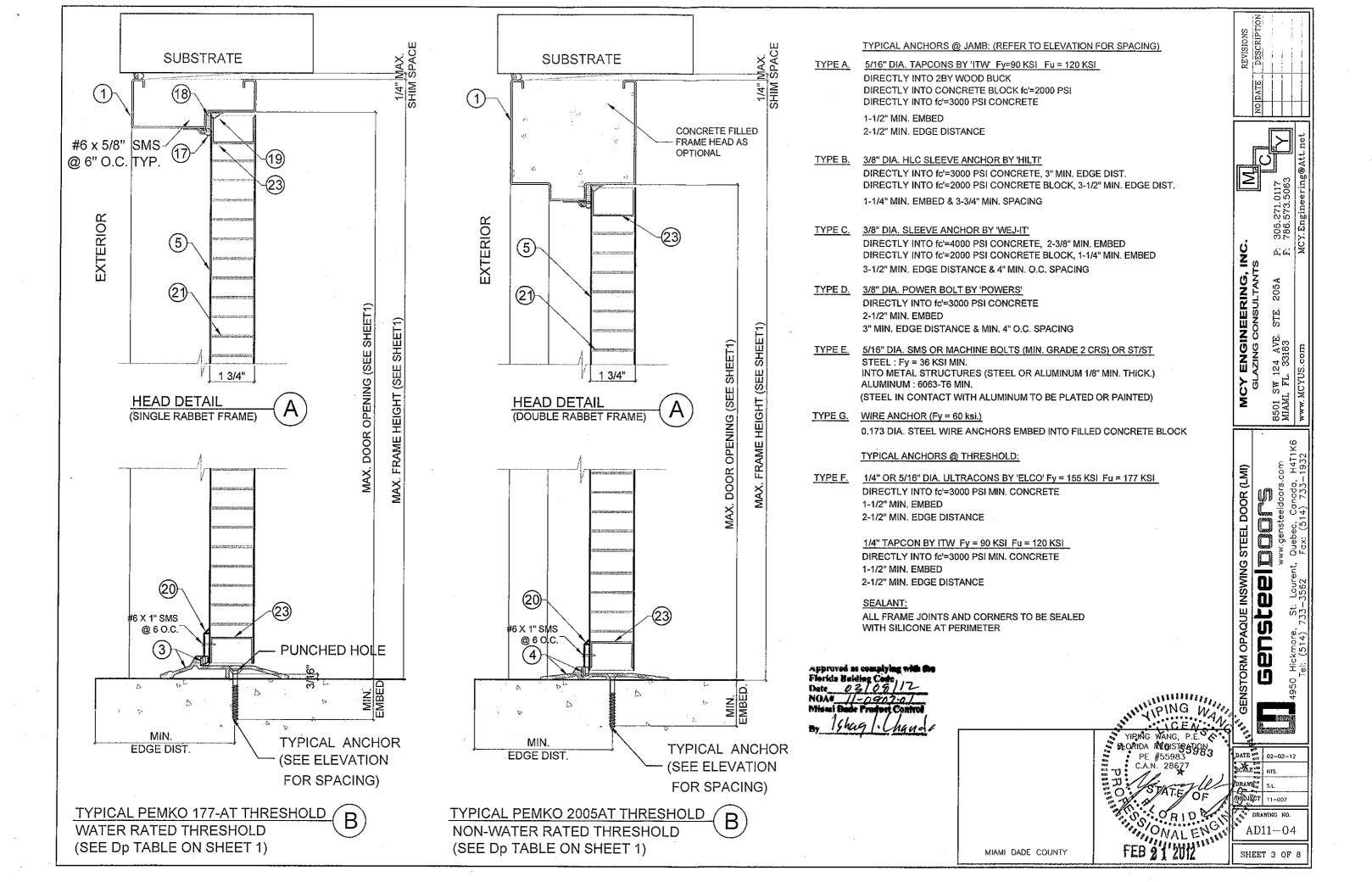
8501 SW 124 AVE. MIAMI, FL. 33183

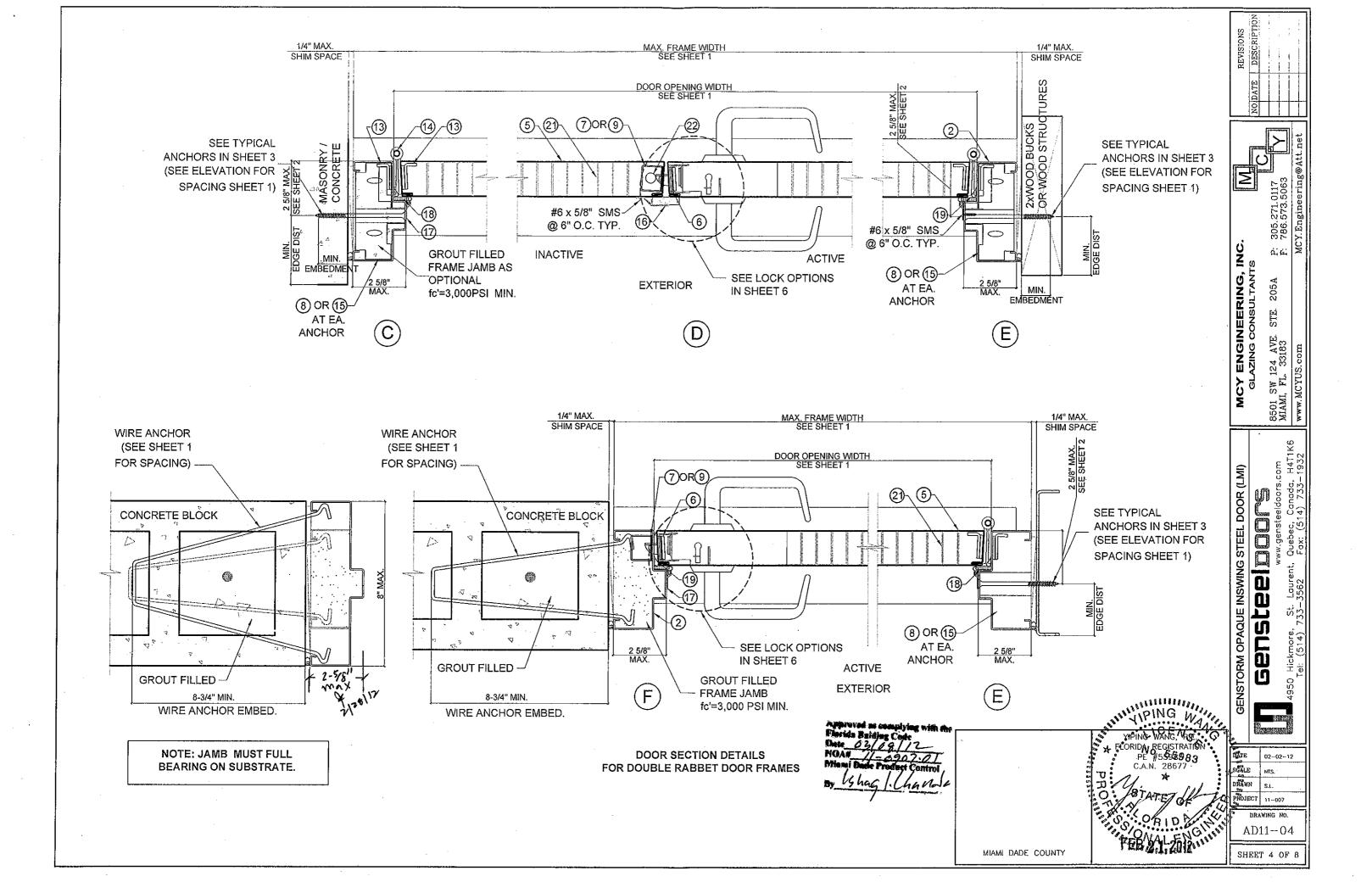
MCY ENGINEERING, INC. GLAZING CONSULTANTS

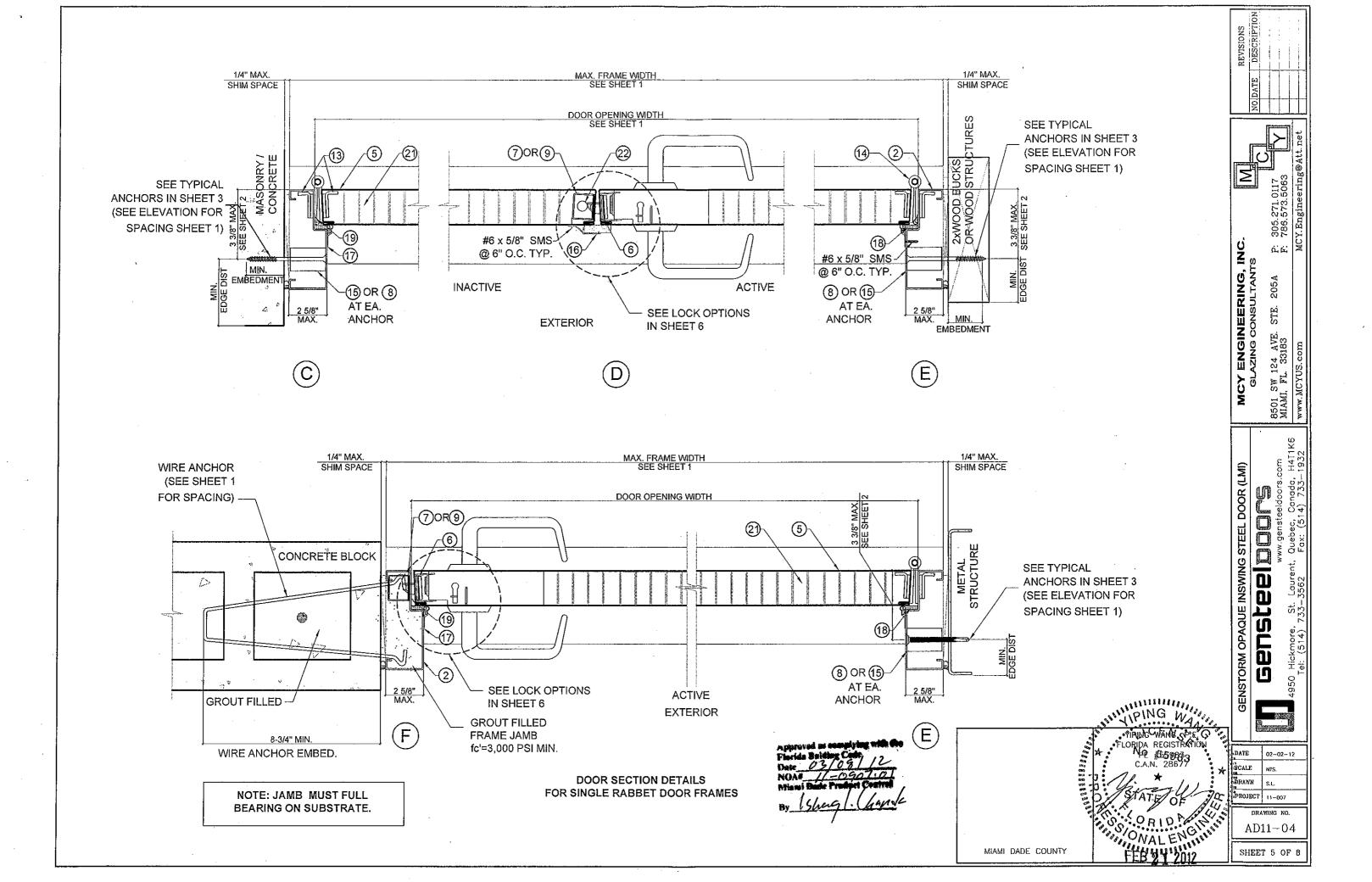
TORM OPAQUE INSWING STEEL DOOR (LMI)

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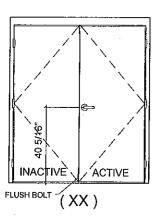






LOCK OPTIONS LOCK OPTIONS FOR DOUBLE DOORS ACTIVE PANEL CAN APPLY TO SINGLE DOORS

(EXTERIOR ELEVATIONS - INSWING DOORS)



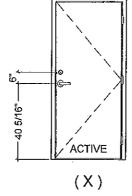
## **OPTION 1**

#### **ACTIVE LEAF:**

**DOREX 12 SERIES LOCK SET** 40 5/16" FROM BOTTOM

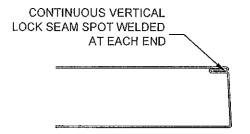
#### **INACTIVE LEAF:**

STRIKE FOR LOCKSET. IVES FB 458 MANUAL FLUSH BOLT (TOP & BOTTOM)

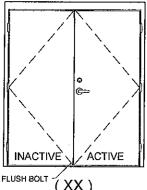


# **OPTION 4**

ACTIVE LEAF: SCHLAGE AL SERIES LOCK SET. 40 5/16" FROM BOTTOM. & SCHLAGE B SERIES DEADLOCK, 46 5/16" FROM BOTTOM



DOOR EDGE CONSTRUCTION



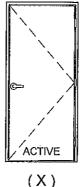
## **OPTION 2**

#### ACTIVE LEAF:

SCHLAGE AL SERIES LOCK SET, 40 5/16" FROM BOTTOM. & SCHLAGE B SERIES DEADLOCK, 46 5/16" FROM BOTTOM.

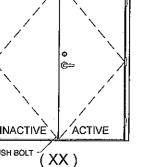
### INACTIVE LEAF:

STRIKE FOR LOCKSET. STRIKES FOR DEADLOCK.



# **OPTION 5**

ACTIVE LEAF: DOREX FHA SERIES LOCKSET, 40 5/16" FROM BOTTOM.

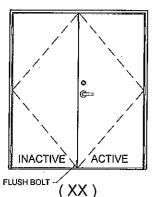


IVES FB 458 MANUAL FLUSH BOLT TOP & BOTTOM



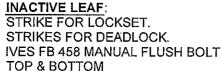
# **OPTION 6**

ACTIVE LEAF: DOREX FH SERIES LOCKSET, 40 5/16" FROM BOTTOM. DOREX TLA SERIES DEADLOCK, 46 5/16" FROM BOTTOM.



### ACTIVE LEAF:

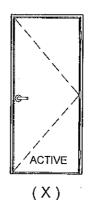
DOREX FH SERIES LOCKSET, 40 5/16" FROM BOTTOM. DOREX TLA SERIES DEADLOCK. 46 5/16" FROM BOTTOM.



**OPTION 3** 

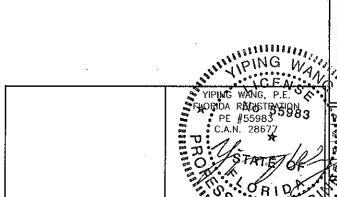
HINGES: STEEL BUTT HINGES 3 PER LEAF. LOCATED AT 12" MAX. FROM TOP OF THE DOOR TO CENTER LINE OF 1ST HINGE AND TO BE SPACED OUT NOT TO EXCEED 33" FROM CL TO CL OF HINGE. TO BE FASTENED BY (4) #12-24 x 1 FLATHEAD MACHINE SCREWS.

HARDWARE LOCATIONS: ALL THESE DOORS WERE MANUFACTURED WITH THE CYLINDRICAL, LEVER, OR KNOBS AT 40-5/16" C.L. FROM THE BOTTOM OF THE FRAME. ALL THE DEADLOCKS WERE POSITIONED 46-5/16" FROM THE BOTTOM OF THE FRAME.



# **OPTION 7**

**ACTIVE LEAF:** SCHLAGE AL SERIES LOCKSET, 40 5/16" FROM BOTTOM.



MIAM! DADE COUNTY

GENSTORM OPAQUE INSWING STEEL DOOR (LMI) 5 Gen 02-02-12

AD11-04

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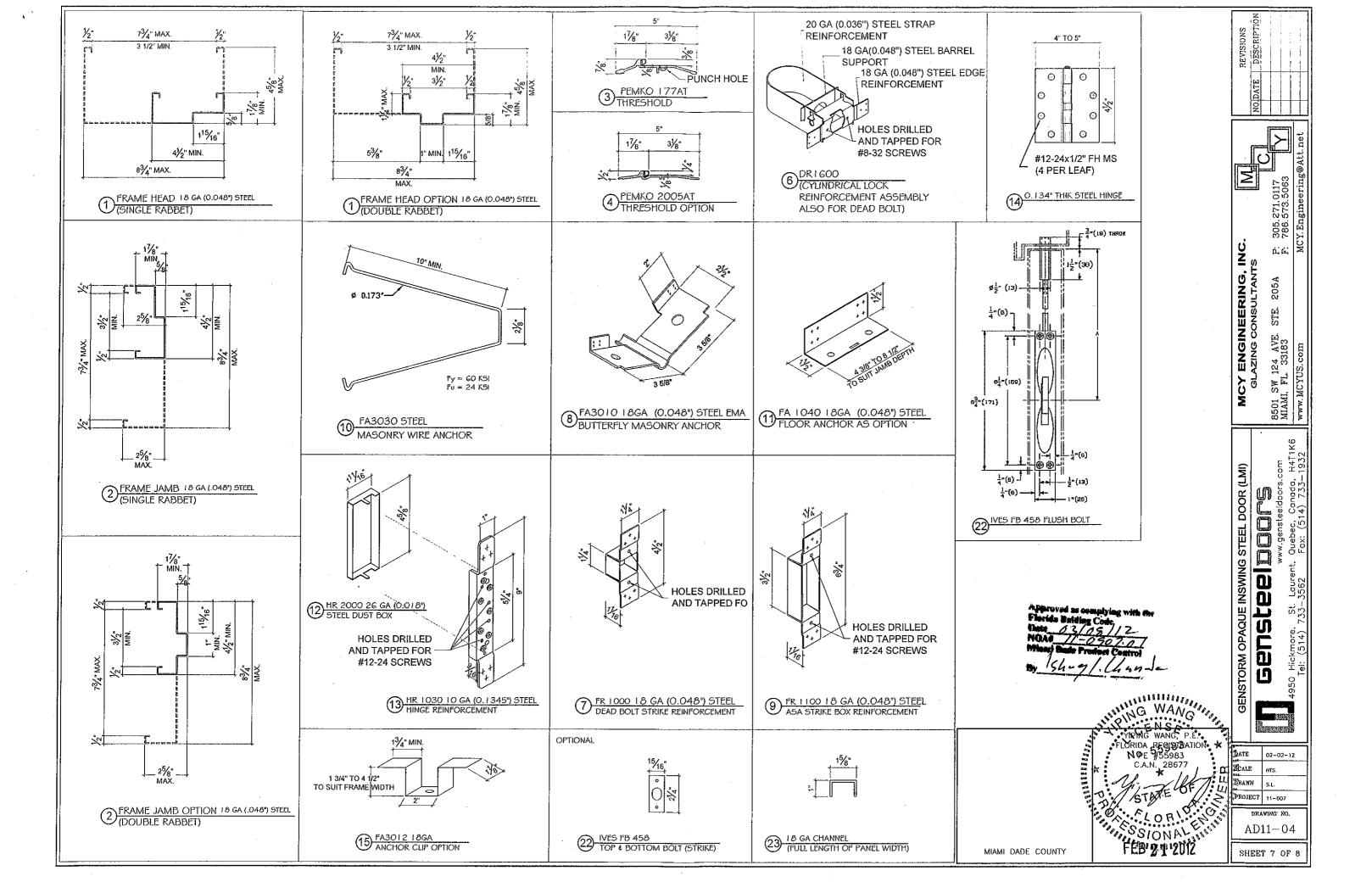
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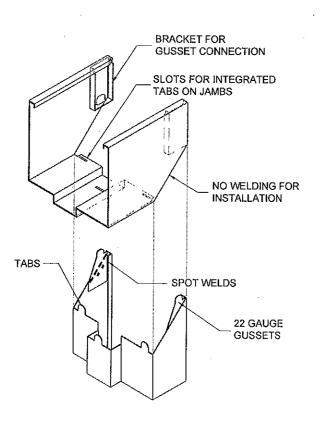
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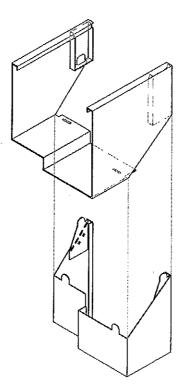
MCY ENGINEERING, INC. GLAZING CONSULTANTS

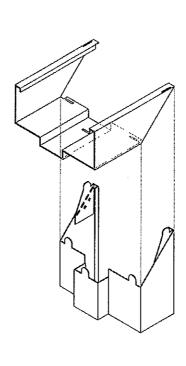


BILL OF MATERIALS						
ITEM	PART No.	MATERIAL	QTY.	DESCRIPTION	MANUFACTURER/SUPPLIER/ REMARKS	
1	-	STEEL OR ST/ST	AS REQD,	FRAME HEAD	18 GA. (0.048MIN.) Fy= 47.3 KSI MIN.	
2	-	STEEL OR ST/ST	AS REQD,	FRAME JAMB	18 GA. (0.048MIN.) Fy= 47.3 KSI MIN.	
3	PMK177-AT	ALUM.	1	THRESHOLD WITH THERMO SEAL INSERT	PEMKO 177AT	
4	PMK 2005AT	ALUMINUM	1	OPTIONAL THRESHOLD WITH THERMO SEAL INSERT	PEMKO 2005AT	
5	-	STEEL OR ST/ST	AS REQD,	DDOR PANEL 1 3/4" THK,	20 GA. (0.036MIN) Fy= 47.3 KSI MIN.	
6	DR1600	STEEL	AS REQD.	CYLINDRICAL LOCK REINFORCEMENT	GENSTEEL PROGRESSION WELDED TO THE PANEL	
7	FR1000	STEEL	AS REQD,	DEAD BOLT STRIKE REINFORCEMENT	GENSTEEL PROGRESSION WELDED TO THE PANEL	
8	FA3010	STEEL	AS REQD.	BUTTERFLY MASONRY ANCHOR	GENSTEEL	
9	FR1100	STEEL	AS REQD.	ASA STRIKE BOX	GENSTEEL PROGRESSION WELDED TO THE FRAME AND/OR THE DOOR	
10	FA3030	STEEL	AS REQD.	MASONRY WIRE ANCHOR 0,173 DIA.	GENSTEEL Fy=60 KSI Fv=24 KSI MIN.	
11	FA1040	STEEL	2	FLOOR ANCHOR 18 GA. $(1-\frac{1}{2}' \times 1-\frac{1}{2}')$ (OPTION)	GENSTEEL	
12	HR2000	STEEL	3 PER LEAF	HINGE DUSTBOX	GENSTEEL	
13	HR1030	STEEL	3 PER LEAF	HINGE REINFORCEMENT WELDED TO FRAME & DOOR	GENSTEEL PROGRESSION WELDED TO THE FRAME AND/OR THE DOOR	
14	HINGE	STEEL	3 PER LEAF	4 1/2" LDNG HINGE	HAGER USA DR EQUAL	
15	FA3012	STEEL	AS REQD.	ANCHOR CLIP (OPTION)	GENSTEEL PROGRESSION WELDED TO THE FRAME	
16	PEMK□ P375R	_	AS REQD.	PEMKO 375R ASTRAGAL WITH SPONGE NEOPRENE	PEMKD (WITH #6x5/8" ST/ST SMS @ 6" D.C.)	
17	PEMKD 303_S	STEEL	AS REQD.	PERIMETER GASKETING WEATHERSTRIP ADAPTER	PEMKD (WITH #6x5/8" ST/ST SMS @ 6" D.C.)	
18	PEMK□ 387	-	AS REQD.	ADHESIVE CLOSED CELL SPONGE WEATHERSTRIP	PEMKD	
19	PEMKO 88	SILICONSEAL TM	AS REQD.	ADHESIVE GASKETING WEATHERSTRIP	PEMKD	
20	PEMKO 315_N	-	1 PER LEAF.	DOOR SWEEP WEATHERSTRIP AT BOTTOM OF PANEL	PEMKD (WITH #6x1' ST/ST SMS @ 6' D.C).	
21	HONEYCOMB CORE		AS REQD,	INSIDE OF DOOR PANEL	GENSTEEL	
55	IVES FB 458	STEEL	AS REQD.	IVES TOP & BOTTOM FLUSH BOLTS	IVES	
23	CH3601	STEEL	AS REQD.	1' X 1-5/8' X 1' X 18GA DOOR END CHANNEL	GENSTEEL	



**CORNER FRAME CONSTRUCTION** 





NANG MIAMI DADE COUNTY



AD11-04

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THE JAMB AND HEAD MEETING CORNERS ARE NOT REQUIRED TO BE WELDED TO EACH OTHER. ALL THE FRAMES WERE TESTED AS "KNOCK-DOWN" UNITS.